

Leading Causes and Types of Fatal and Nonfatal Injuries in Construction

In the construction industry, the ranking of causes of deaths from work-related injuries differs from that for causes of serious non-fatal injuries (charts 36a and 36b).

For instance, transportation incidents cause more than one-fourth of deaths from injuries in construction, but are less than 4% of nonfatal injuries. Overexertion, which does not cause deaths, is the second-leading cause of nonfatal injuries.

Fatal falls tend to differ in type from nonfatal falls (*see* also chart book page 38). Although falls were 31% of fatal injuries and 21% of nonfatal injuries in 1999, 98% of the fatal falls were to a lower level, compared with 56% of the nonfatal falls. Of the fatal falls, just over 1% were to the same level, compared with 34% of the nonfatal falls.

The leading cause of nonfatal injuries, contact with objects, most often is being struck by an object. The rate of injuries from contact with objects that resulted in cases with days away from work – 115.6 per 10,000 full-time construction workers in 1999 – was higher for construction than for any other industry.

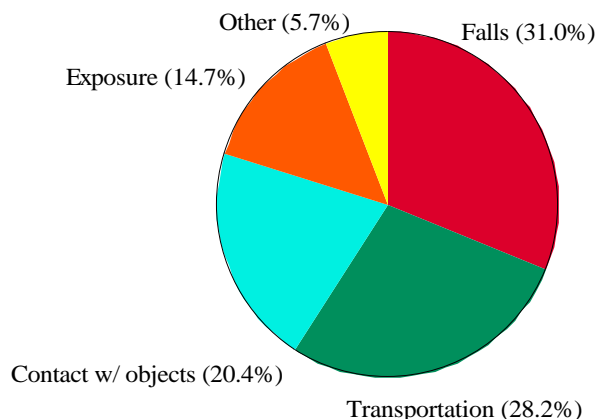
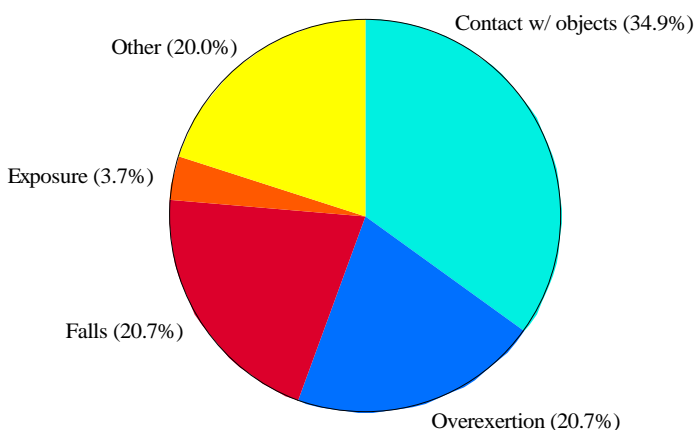
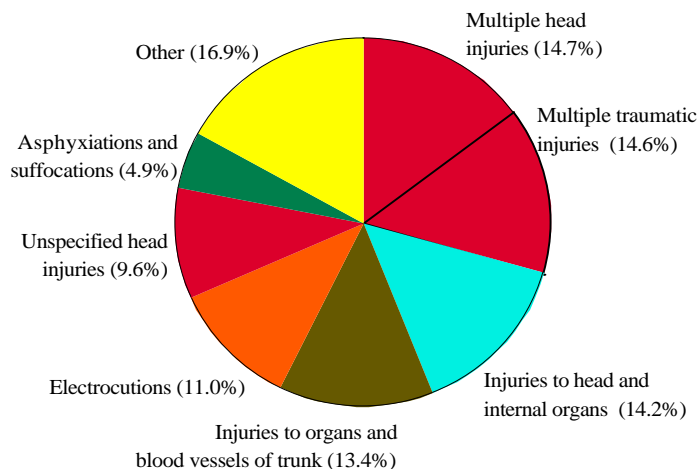
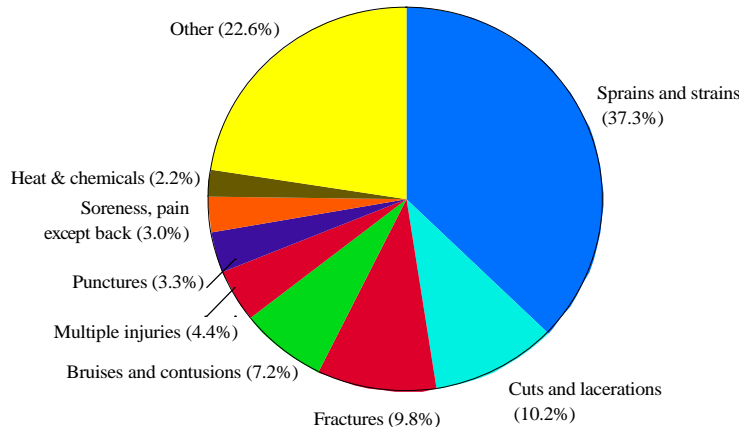
The most common *types* of injuries resulting in deaths are unlike the leading types of nonfatal injuries (charts 36c and 36d). Because most of the deaths result from traumatic blows

(from falls from heights or being struck by vehicles), it is not surprising that multiple head injuries, traumatic injuries, and massive internal injuries make up nearly 60% of the fatal injuries.

On the other hand, musculoskeletal disorders – including most sprains and strains – are the most common type of non-fatal injury in construction. In 1999, sprains and strains resulted in lost workdays for 72,371 construction workers, according to the Bureau of Labor Statistics (BLS).

The data on deaths are derived from the 1999 Census of Fatal Occupational Injuries and the nonfatal-injury data are from the 1999 Annual Survey of Occupational Injury and Illnesses, both conducted by BLS.

When BLS presents detailed data on nonfatal injuries and illnesses, the data cover only the private sector and exclude the self-employed. In addition, the data are available only with injuries and illnesses combined. Illnesses are only about 1.7% of the total in construction, however, and do not substantially affect injury rates. Many of the most serious work-related illnesses in construction, such as asbestosis or cancers, take years to develop and thus would not be reported as cases resulting in absences from work. So, the charts presented here are essentially about injuries.

36a. Distribution of leading causes of deaths from injuries in construction, 1999**36b. Distribution of leading causes of cases with days away from work, construction, 1999****36c. Distribution of types of fatal injuries in construction, 1999****36d. Distribution of types of nonfatal injuries and illnesses in construction resulting in days away from work, 1999**

Note: Charts 36a and 36b - "Contact with objects" includes struck by an object, struck against an object, caught in or compressed by equipment or objects, and caught in or crushed in collapsing materials. "Exposure" includes exposure to electric current, to temperature extremes, to air pressure changes, and to caustic, noxious, or allergenic substances. "Other" includes fires and explosions; violence, including self-inflicted injuries, assaults, and assaults by animals; and bodily reaction, such as when startled

Charts 36a and 36c - Total of 1,228 deaths from injuries.

Chart 36a - "Transportation incidents" refers to injuries involving vehicles – including the capsizing of a crane that is being moved – and not necessarily on the work site.

Chart 36b - Data cover private sector only and exclude self-employed. "Other" also includes transportation incidents. Cases include only those involving days away from work, not just restricted work activity. Illnesses are about 1.7% of the total.

Charts 36b and 36d - Total of 193,765 cases involving days away from work.

Chart 36c - "Other" includes drownings, poisonings and toxic effects including animal bites, and multiple traumatic injuries not elsewhere classified. Percentages may not add up to 100% because of rounding.

Chart 36d - Data cover private sector only and exclude self-employed. Numbers do not add up to 100% because of rounding. "Other" includes back pain and other pain, electrical burns, abrasions, heat stress, and carpal tunnel syndrome. Cases include only those involving days away from work, not cases with only restricted work activity. Illnesses are about 1.7% of the total.

Source: Charts 36a and 36c - Calculations by Risana Chowdhury, The Center to Protect Workers' Rights, from data provided by the Bureau of Labor Statistics for the Census of Fatal Occupational Injuries.

Charts 36b and 36d - Bureau of Labor Statistics 1999 News Release (Annual Survey of Occupational Injuries and Illnesses), March 2001, table5. Also BLS ftp web site <http://stats.bls.gov/iif/oshwc/osh/case/ostb0976.pdf> table R64 and <http://stats.bls.gov/iif/oshwc/osh/case/ostb0961.pdf>, table R49.